INTRODUCTION

Recently most consumers are concerned, that meat should contain only a small amount of fat. Too much fat discourages the purchase of meat and is commonly removed either before cooking or during the meal. But most consumers want some fat, partly because the concept of the ideal cut of meat include fat, and also because a small amount of fat is required for optimum eating quality. This is because fat confers the characteristic species flavour on meat through a complex interaction between components of fat and lean, and also because it prevents drying out during cooking.

The problem of excessive fatness in broilers is of economic importance, particularly in those countries in which the housewife demands a rather large broiler which has to be marketed at about 8 weeks of age. The dietary variable having the greatest effect on fat content of broilers is the supply of nutrients per unit of energy. There are few-data on the effect of nutrients other than crude protein on body fat growth.

Poultry fat characteristics and composition are known to vary with species, body location and diet particularly dietary fat (Porter and Britton 1974). Also, chicken adipose tissue has little capacity for fatty acid synthesis, but is able to take up fatty acid transported from the liver as lipoproteins (Leveille, et al., 1975).

Most researches on the value of added fat in feeding poultry have involved the use of triglycerides either inedible animal fats or edible vegetable oils. Also, in the last three decades more attention was directed towards the deposition of fatty acids in laying hens or very young chicken tissues. On the other hand, less attention was directed towards chickens of broiler age.

The present investigation deals primarily with the effect of supplementary dietary fats (hydrogenated vegetable oils (HVO) and acidulated cottonseed soapstock (ACS) on the fatty acid distribution and fat soluble vitamins of chicken adipose tissues.